**Bachelor of Science – Robotics Engineering** 2021-2022

**Fall Year 1**

- **MA1160 (4) or MA1161 (5) Calculus I**
  - Optional: Enterprise participation. Try if desired.

**Spring Year 1**

- **MA2160 (4) Calculus II**
  - Co-reqs

**Fall Year 2**

- **MA3160 (4) Multi-variable Calculus**
  - *MA2321 (2) Accel. Linear Alg*
  - *MA3521 (2) Accel. Diff Eq*

**Spring Year 2**

- **EE3010 (3) Circuits & Instrumentation**
  - Co-register **MA2320/21 MA3520/21**
- **EE2180 (3) Intro. to Robotics**
- **CS1111 or CS1121**
- **CS1111 Intro to Programming In C / C++**
- **PH2100 (3) Univ. Physics I**
  - [Take PH2110 (2) Workshop if <C In Calc I]

**Fall Year 3**

- **EE3161 (3) Signals & Systems or MEEM3750**
  - **EE3901 (2) Design Fundamentals**
  - **EE3280 (3) Robot Operating Systems**
  - **EE3171 (4) Microcontroller Applications for CPS**
  - **EE3261 (3) Control Systems**

**Spring Year 3**

- **EE4235 (3) Sensing & Processing in Robotic Apps**
  - **EE4910 (2) or MEEM4911 (2) Sr. Design Sem. 2**

**Fall Year 4**

- **EE4901 (2) or MEEM4901 (2) Sr. Design Sem. 1**

**Spring Year 4**

- **EE4235 (3) Directed Technical Elective: EE4219/20 or EE4373 or MEEM4705 or EE4375**

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**Total 123 cr. or 124 cr. plus 3 units co-curricular activities**

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**Notes:**

1) **MA1160(C) or MA1118/11(C)**
2) **PH1100 (1) Physics 1 Lab**
3) **CH1150/51 (4) & CH1153 (1) Univ Chem I**
4) **PSY2000 is strongly recommended**
5) **ENT2950 (1)**
6) **ENT2960 (1)**
7) **ENT3950 (1)**

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**Contact:**

Undergraduate advisor:
Judy Burl  EERC 131  jmburl@mtu.edu

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**Additional Information:***

- **May use upper level language course in place of UN1015.**
- **Add 1 cr. Free Elective if SAT2711 was 3 credits**
- **Choose at least 6 credits of 3000-4999 HASS**
- **Entrepreneurship Option:**
  - **ENT2950(1) ENT3950(1) ENT4950(2)**
  - **ENT3960(1) ENT4960(2)**
  - **ENT1950(1) ENT1960(1)**

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**Study Abroad:**
722 M & M
T 2pm, W 11am

**Attend Career Services events early on:**
Semester 5 or 6 is good time to co-op.
220 Admin Building